



DEPARTMENT OF THE AIR FORCE

OFFICE OF THE CHIEF OF STAFF

WASHINGTON, DC

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MEMORANDUM FOR ALMAJCOM/FOA/DRU

FROM: HQ USAF/CC
1670 Air Force Pentagon
Washington, DC 20330-1670

SUBJECT: Air Force Fitness Program

The Air Force is committed to enhancing the health, well being, and performance of every member. Total physical fitness includes cardiovascular capacity, muscular strength and endurance, flexibility and body composition. We currently assess cardiovascular fitness and body composition. Over the past two years we have explored expanding this assessment for Force Enhancement and to ensure compliance with DoD instructions.

Beginning in July 2000, the annual cycle ergometry test will be expanded to include muscular fitness assessments using push-ups and crunches for all Air Force members. However, pass/fail standards won't be decided until January 2002, giving AF leadership sufficient opportunity to evaluate its effectiveness. All members should receive a practice evaluation prior to 1 July 2001. Units must implement the additional procedures NLT 1 July 2000. Specific policy guidance will be issued from the Air Force Medical Operations Agency. The Health and Wellness Center staff on every installation will provide local information and training.

These changes to the AF Fitness Program are vitally important. Physical fitness remains an essential component of combat readiness and expeditionary competence. We will continue to research methods to improve the health and performance of the Force.

My POC for this program is Lt Col Regina Watson, AFMOA/SGOP, 110 Luke Avenue, Room 405, Bolling AFB, DC 20332-7050, DSN 297-4286.


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Muscular Fitness

1.0. BACKGROUND:

1.1. Purpose: Describe procedures for conducting physical fitness testing of Active Duty, specifically the muscular fitness components.

1.2. Required Equipment:

1. Stopwatch w/count down function
2. Notepad, Pens, Permanent marker(s), Clipboard(s), Appropriate forms
3. Exercise Mat, no more than 1 inch thick (Optional)
4. Disinfectant soap

1.3. Requirements for Conducting the Assessment:

1.3.1. Testing should be conducted immediately after the aerobic fitness assessment. The Fitness Program Manager (FPM) must ensure areas used for testing are reserved and available. Encouragement from members waiting to be assessed is not allowed.

1.3.2. The Fitness Assessment Monitor (FAM) will monitor the member's performance and give instruction as needed (*e.g.*, if a member is not performing a push-up correctly, the FAM shall tell the member what he/she is doing wrong, etc.). A mat is highly recommended for the crunches if no carpeting is available.

1.3.3. The member will wear appropriate clothing. Clothing should fit properly such that the FAM can monitor the member's form (as described in Sections 5.7. and 6.5.). Oversized T-shirts or sweatshirt/pants can "hide" the member's form, making it difficult for the FAM to determine whether the member is performing the assessment correctly. Members may not assess in any combination of military uniform. Appropriate fitness footwear (walking/jogging shoes) must be worn.

2.0. PROGRAM REQUIREMENTS:

2.1. Minimum Fitness Standard: Members are expected to maintain an active lifestyle such that a minimum level of fitness is achieved and maintained (see AFI 40-501). Members are required to meet Air Force fitness standards (TBD pending refinement and approval) and are required to maintain that fitness level throughout the year.

2.2. Hardware and Software Configurations: All hardware and software used for the fitness program must conform to approved configurations.

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2.3. Assessment Standardization: Standardization is the key to a valid, fair assessment for all Air Force personnel. Assessment variables must be minimized for results to be consistent. The following sections will explain the proper procedures for administering the Muscular Fitness Test.

2.4. Manpower Requirements: A FAM observes and implements the Fitness Test (to include aerobic and muscular fitness). Each member must be assigned a FAM to monitor each assessment (*i.e.*, hold feet during crunches and count correct number of crunches performed).

3.0. PRE-ASSESSMENT PROCEDURES:

3.1. Handouts: In addition to the handouts received for the ergometry assessment, the UFPM will provide each member a copy of the Muscular Fitness Preparation Guide (see Appendix A) no later than 7 days prior to the test.

3.2.. Check-In: The FAM will follow the assessment procedures for member check-in.

3.3. Muscular Fitness Assessment Explanation: During the specified rest periods between assessments, the FAM will provide instructions to the members on the following muscular fitness assessment.

4.0. GENERAL MUSCULAR FITNESS TEST PROCEDURES:

4.1. Test Site. The FPM/FAM must ensure that adequate free space is provided in the assessment area. Testing should not take place in high traffic areas (*e.g.*, hallways, waiting areas, etc), but may be conducted in large open spaces.

4.2. Test Sequence: All muscular fitness assessments must be completed within 8 minutes of completing the aerobic (*e.g.* cycle ergometry) assessment. The required test order is as follows:

4.2.1. Aerobic Assessment.

4.2.2. Crunch Assessment.

4.2.3. Push-up Assessment.

4.3. Rest Time: Between each assessment, the FAM will allow the members 3 minutes to rest. The FAM must read instructions for the following assessment to the members during the rest period.

5.0. CRUNCH ASSESSMENT PROCEDURES:

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5.1. Purpose: The crunch is utilized to assess the member's abdominal muscular fitness

5.2. Assessment Duration: The members will have two minutes to complete as many crunches as possible.

5.3. Assessment Explanation: The FAM will read the crunch instructions (as found in Part (I) in Appendix B) to the members during the rest period which follows the aerobic assessment. It is recommended that the FAM remind the member to stretch out the hip flexors *and abdominals* (no stretch shown) prior to beginning the assessment (example stretches located in Appendix C).

5.4. Starting Position: The use of a mat is optional. The FAM will instruct the members to lie face up on the floor/mat. In the starting position, the member's feet may partially extend off the mat, but the buttocks, shoulders, and head must remain on the mat. The member's knees will be bent at a 90° angle, with the feet/heels in contact with the floor at all times. The heels and buttocks must remain on the floor/mat during the entire assessment. The member's arms will be crossed over the chest with the hands at the shoulders or resting on the upper chest.

5.5. Foot Hold: The member's heels must remain anchored to the floor throughout the assessment. The members may direct their FAMs on how to hold the feet (holding down feet with the hands or putting knees on feet), but the FAMs may not anchor the members' legs by holding onto the calves during the assessment as this may aid the member while performing the crunches. Enough force must be applied to keep the feet/ankles from rising while the crunches are being accomplished. An anchored toe hold bar may be used to anchor the feet so long as the members heels remain in contact with the ground at all times and the bar cannot move (in this case FAM does not need to anchor feet).

5.6. Complete Crunch: A complete crunch is accomplished when the upper torso of the member is raised off the floor/mat, the elbows touch the knees, and the upper torso is lowered back to the floor/mat until the shoulder blades touch the floor/mat. **Elbows must touch the knees or upper thigh at the top of the crunch, and the shoulder blades must touch the floor/mat at the bottom of the crunch.** The hands must stay in contact with the shoulders/chest at all times. The member may only rest in the up position. If the member rests in the down position, the FAM will terminate the assessment.

5.7. Stopwatch: The FAM is responsible for operating the stopwatch. The FAM will program the stopwatch to count down from the 2-minute mark. When the FAM instructs the members to begin, the FAM will start the stopwatch, observe the test, and will notify the member how much time is remaining at 1 minute, 30 seconds, and 15 seconds. Prior to beginning the assessment the FAM will inform the members to continue to perform crunches until the FAM directs the members to stop or until the member is no longer able to continue.

5.8. Counting/Monitoring: The FAM will count the number of correct crunches out loud, incorrect crunches will not be counted. The FAM will monitor the member for correct form and will repeat the number of the last correct crunch if the member breaks the correct form (*e.g.*, one, two, three, three, four, etc.). The FAM may also give the member instructions on what needs to be cor-

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rected in addition to repeating the last correct number (e.g., you're not going down far enough, keep your back straight, etc.). If an anchored toe hold bar is used, the FAM must remain in a position to ensure the shoulder blades touch the floor and the elbows touch the knees.

5.9. Completion/Recording: Upon completion of the crunch assessment, the FAM will record the total amount of correct crunches (refer to the score card at Appendix C) and prepare for the next assessment.

6.0. PUSH-UP ASSESSMENT PROCEDURES:

6.1. Purpose: The push-up is utilized to assess the member's upper body muscular fitness .

6.2. Assessment Duration: The member will have two minutes to complete as many push-ups as possible.

6.3. Assessment Explanation: The FAM will read the push-up instructions (as found in Appendix B, Part (II)) to the members during the rest period which follows the crunch assessment. It is recommended that the FAM remind the member to stretch out the triceps, deltoids (shoulders), and pectoralis (chest) muscles during the rest period (Appendix C).

6.4. Starting Position: The member will begin in the starting position, with arms fully extended, with the body in a straight line from head to heel. The feet may be no more than 12 inches apart. The member's hands and toes must remain on the floor/mat during the entire assessment. The body should maintain a planer form from head to heel (the body may not bow unless resting in the up position). The member may rest in the up position only. The feet may not be supported or braced (against a wall, etc.).

6.5. Complete Push-up: From the starting position (elbows extended), the member will lower the body to the ground until the upper arm is at least parallel to the floor (elbow joint at least 90° angle) before pushing back up to the starting position (the chest may touch the floor). The member completes one full push-up after returning to the starting position. It is important to monitor the member's form and make sure the body does not bow at the waist as the member tires. The body must remain rigid during the assessment (the back must remain straight unless resting).

6.6. Stopwatch: The FAM is responsible for operating the stopwatch. The FAM will program the stopwatch to count down from the 2-minute mark. When the FAM instructs the members to begin, the FAM will start the stopwatch, observe the test, and will notify the member how much time is remaining at 1 minute, 30 seconds, and 15 seconds. Prior to beginning the assessment the FAM will inform the members to continue to perform push-ups until the FAM directs the members to stop or until the member is no longer able to continue.

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6.7. Counting/Monitoring: The FAM will count the correct number of push-ups out loud. The FAM will monitor the member for correct form and will repeat the number of the last correct push-up if the member breaks correct form (*e.g.*, one, two, three, three, four, etc.). The FAM may give the member instruction on what is wrong in addition to repeating the last correct number. The FAM must be in a position to monitor the member's form and the elbow joint.

6.8. Completion/Recording: Upon completion of the push-up assessment, the FAM will record the total amount of correct push-ups (refer to the log at Appendix C) and notify the member that they have finished testing.

7.0. POST-ASSESSMENT PROCEDURES:

7.1. Stretching: Upon completing the assessment, the FAM should remind the members to stretch carefully (see Appendix D).

7.2. Clean-up: The FAM is responsible for ensuring the mats are cleaned/disinfected after each assessment.

7.3. Data Collection: The FAMs will give all the handouts and score cards to the FPM or designee. The FAM/FPM/designee will input each member's muscular fitness assessment results into the database (FitManagement).

8.0. APPENDIX

8.1. Appendix A: Muscular Fitness Preparation Handout

8.2. Appendix B: FAM Script

8.1. Appendix C: Recommended Stretches

8.2. Appendix D: Muscular Fitness Score Card

8.3. Appendix E: FAM Checklist

Muscular Fitness Preparation Handout

Your level of muscular fitness will be evaluated with the crunch and push-up tests. In these assessments, the number of crunches and push-ups you can do in two minutes (two minutes for each exercise) will determine your muscular fitness.

The expanded fitness assessment involves doing as many crunches in two minutes as possible, followed by measuring the number of push-ups you can do in two minutes. To achieve the best results, you are encouraged to arrive at the appointed time and place after observing the following preparatory recommendations. Failure to follow these recommendations may result in a lower result. If you fail to follow these recommendations, the assessment will still be performed as scheduled.

- Stretch out appropriate muscles prior to each assessment
- Avoid heavy physical exercise/activity and alcohol the night before and the day of your assessment.
- Maintain adequate fluid intake.
- Get a good night's sleep prior to the assessment.
- Wear normal fitness attire, with the exception of "oversized" clothes. The shirt must not be so loose that the bend at your arm cannot be discerned during the pushup. Walking/running shoes must be worn.

The fitness assessment monitor may be either male or female.

FAM SCRIPT

VERBAL INSTRUCTIONS FOR THE MUSCULAR FITNESS ASSESSMENTS

I. Crunch Verbal Instructions: TO BE READ TO THE MEMBER DURING THE REST PERIOD

This test measures your abdominal muscular endurance (stomach muscles).

(FAM: Read during the rest period - Prepare the members to test).

Please lay on your back with your *heels* flat on the floor, *knees* bent at 90° angles, and your arms crossed in front of the chest such that your hands/fingers remain in contact with your shoulders or chest. **If a toe hold bar is used:** Anchor your feet to the ground by hooking your feet/toes under the bar. Your heels may not rise off the ground while you perform the assessment.

If a toe hold bar is NOT used: I will hold your feet down with my hands. I can not hold your legs behind your calves. Let me know if I need to hold your feet differently prior to beginning the assessment (*e.g.*, I'm holding your ankles/feet too tight or not enough).

(FAM: Read these instructions when the members are ready to test).

Your hips must remain on the floor at all times (do not lift your hips off the floor to gain momentum). Your shoulder blades **must** touch the floor between each repetition. In the up position, you will touch your elbows to your knees or upper thigh and then return down until your shoulder blades touch the floor (your hands may not lose contact with your shoulders/chest at any time). This will count as one crunch.

Your breathing should be as normal as possible. Make sure you do not hold your breath. It is recommended that you exhale every time you come up and inhale when you come down.

You have **two minutes** to perform as many **correct** crunches as possible. ***Any resting must be done in the UP position.*** I will count the **correct** number of crunches out loud. **Incorrect** crunches **will not** be counted and I will repeat the number of the last correct crunch or tell you what you're doing wrong until you correct the error. Your score will be the total number of correct crunches completed in two minutes.

Ready? Begin.

FAM SCRIPT (cont...)

II. Push-Up Verbal Instructions: TO BE READ THE MEMBER DURING THE REST PERIOD

The push-up is one assessment of muscular fitness for the upper body (shoulder, chest, and triceps).

Your hands will be placed on the floor, slightly wider than shoulder width apart, with your fingers pointing forward. You must lower your upper body until your upper arm is at least parallel to the floor (elbows bent at 90 degrees). If you do not come down that far the push-up will not count.

Start in the up position with your elbows fully extended, feet no more than 12 inches apart, and your weight supported by your arms and toes. You must keep your back straight at all times and lower your upper body until your upper arm is at least parallel to the floor, then return to the up position (arms fully extended). This is one repetition.

Keep your hands and feet on the floor if you need to rest. Any resting must be done in the **UP** position.

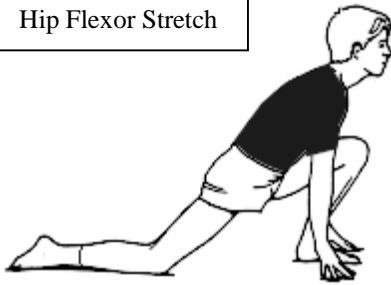
Your breathing should be as normal as possible. Make sure you do not hold your breath. It is recommended that you exhale every time you press up and inhale when you come down.

You have **two minutes** to perform as many push-ups as you are able. I will count the **correct** number of push-ups out loud. Incorrect push-ups will not be counted, and I will repeat the number of the last correct push-up or tell you what you're doing wrong until you correct the error. The total number of correct push-ups in two minutes is recorded as your score.

Ready? Begin.

Recommended Stretches Before and After Assessment

Hip Flexor Stretch



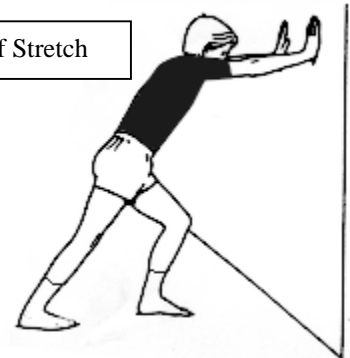
Knee to Chest Stretch



Hamstring Stretch



Calf Stretch



Shoulder Stretch



Chest/Biceps Stretch



Shoulder Stretch



Hold each stretch 10 - 30 seconds. Repeat if desired.

Muscular Fitness Assessment Score sheet

Muscular Fitness Testing Score sheet	
Member Name:	Date:
Member SSN:	FAM:
Crunches:	Number Completed <input type="text"/> 2 min
Push-Ups:	Number Completed <input type="text"/> 2 min

Muscular Fitness Testing Score sheet	
Member Name:	Date:
Member SSN:	FAM:
Crunches:	Number Completed <input type="text"/> 2 min
Push-Ups:	Number Completed <input type="text"/> 2 min

Checklist

	Pre-Assessment Procedures
	Give handouts/questionnaire to member (7 days prior)
	Meet and greet members / Check Military ID
	Provide brief explanation on what will be assessed
	Assessment Procedures
	Members complete aerobic assessment
	Allow members 3 minute (max) rest period
	† Read crunch explanation to members during rest (see Part I, Appendix B)
	<i>Crunch Assessment</i>
	Ensure members' feet are anchor
	Start stopwatch, begin assessment
	Observe test
	Sound off time remaining at 30 second and last 10 second marks
	Record score
	Allow members 3 minute (max) rest period (Begin stopwatch)
	† Read push-up explanation to member (see Part II, Appendix B)
	<i>Push-up Assessment</i>
	Start stopwatch, begin assessment
	Observe Test
	Sound off time remaining at 30 second and last 10 second marks
	Record Score
	Instruct members to return to duty
	Give score sheets to FPM/designee

Crunch	Male	Female
Age	2 min	2 min
<24	53	53
25-29	50	50
30-34	42	42
35-39	38	38
40-44	32	32
45-49	30	30
50-54	28	28
55-59	27	27
Push - Up	Male	Female
Age	2 min	2 min
<24	42	19
25-29	40	17
30-34	36	15
35-39	34	13
40-44	30	12
45-49	25	10
50-54	20	9
55-59	18	8